DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002788 Address: 333 Burma Road **Date Inspected:** 24-May-2008

City: Oakland, CA 94607

OSM Arrival Time: 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Fu Yu Hong **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** and Tower

Summary of Items Observed:

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

OBG Assembly area

- a) Two ZPMC welders were observed FCAW the CJP weld joints that join the lower FL2-1 web plate to the FL-3 north and south web plates. The CJP FCAW was being performed in the 3G position.
- b) ZPMC was observed ZPMC performing automatic oxyfuel gas cutting operations on the SEG 018-008 99(beveling the side end of the bottom plate and laying out the bottom plate from the Segment 014 before beveling the side end of the plate).
- c) ZPMC was observed installing ceramic backing on the SEG-015 at the junction of the side plate and bottom plates weld joints 7 and 8. See digital photograph below.
- d) ZPMC was observed heat straightening the side panels SP45-A and 33A with the heat straightening request HSR-1 (B) 1000 for Segment 13A.
- e) ZPMC was performing fit-up and drilling operations on the floor beam SSD18- 3AE.
- f) ZPMC was observed continuing air carbon gouging operations on side plates butt joints welded with ceramic backing. UT weld defects were being repaired.

Three ZPMC QC inspectors which included one Lead CWI were observed in this shop.

Bay 4-Tower Internal Diaphragm Plates QA Observations-

1) Caltrans QA observed that ZPMC was heat straightening operations on the diaphragm rings.

WELDING INSPECTION REPORT

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Bay 2 QA Observations-

- 1) 77 Meter Mock-Up- Caltrans QA observed no work was being performed on or around the area of this mock-up.
- 2) 114 Meter Mock-UP- Caltrans QA observed that no work was being performed on or around the area of this mock-up.
- 3) Rolling and Thermal cutting- Caltrans QA observed ZPMC was not rolling or cutting plate material this shift. The work in this bay has decreased to the point were little if any Caltrans work is being performed on a daily basis.

Summary of Conversations:

The QA inspector had a conversation with ZPMC representative Li Yu Yang and ABF representative Kevin Dye. The QA inspector brought to the attention that ZPMC was not performing RT as required per section 12 from the AWS D1.5(2002) on the weld repair. The QA inspector added in later conversation with Mr. Kevin Dye that the special provision addressed separately SPCM members and weld repairs on note # 1 thru 5. The QA inspector brought to the attention of the Task Leader Robert Cuellar.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Acuna, Alfredo	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer